

REMARKS

Courtesies extended to Applicants' representative during the telephone interview on April 17, 2003, are acknowledged with appreciation. Claims 1, 3, 8-10, 106, and 107 have been amended to define Applicants' invention with greater particularity. As amended, the claims are supported by the specification and the original claims and add no new matter. Thus, entry of the amendments are respectfully requested. Claims 1, 3-12, and 104-111 are pending.

A. Regarding the Claim Objections

The objections to claims 1, 3, 8, 9, 106, and 107 have been addressed as follows. Claim 1 has been amended so that the word "comprising" is now followed by a colon rather than a semicolon. Claim 3 has been amended to depend from claim 1, rather than cancelled claim 2. Claims 8 and 107 have been amended to correct the spelling of "polyacrylamide" and to delete duplicate reference to "polystyrene". Further with respect to claims 8 and 107, the Examiner asserts that "polystyrene" is recited three times in these claims. Applicants note, however, that "polystyrene" is recited only twice, therefore the present amendment deletes the second recitation of "polystyrene". Claim 9 has been amended to include a period at the end of the claim. Finally, claim 106 has been amended to delete an inadvertent comma appearing at the end of the claim. Accordingly, reconsideration and withdrawal of the objections to claims 1, 3, 8, 9, 106, and 107 are respectfully requested.

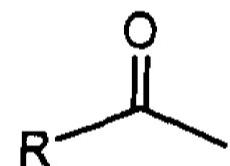
B. Rejections Under 35 U.S.C. § 102(a) and § 102(b)

The rejections of claims 1, 4-7, and 9-12 under 35 U.S.C. § 102(a), as allegedly being anticipated by Tsien, et. al. (U.S. Patent No. 6,008,378), and under 35 U.S.C. § 102(b), as allegedly being anticipated by Griffin, et. al. (Science, Vol. 281, p. 269-272, July 10, 1998), are respectfully traversed. Applicants' invention, as defined for example, by claim 1, distinguishes over the cited references by requiring a method for isolating a polypeptide of interest comprising contacting a modified fluorescein arsenical helix binder (FlAsH) compound, which has been modified by acylation with an amino acid, or a tautomer, anhydride or salt of said modified FlAsH compound, immobilized on a solid support with a solution containing a

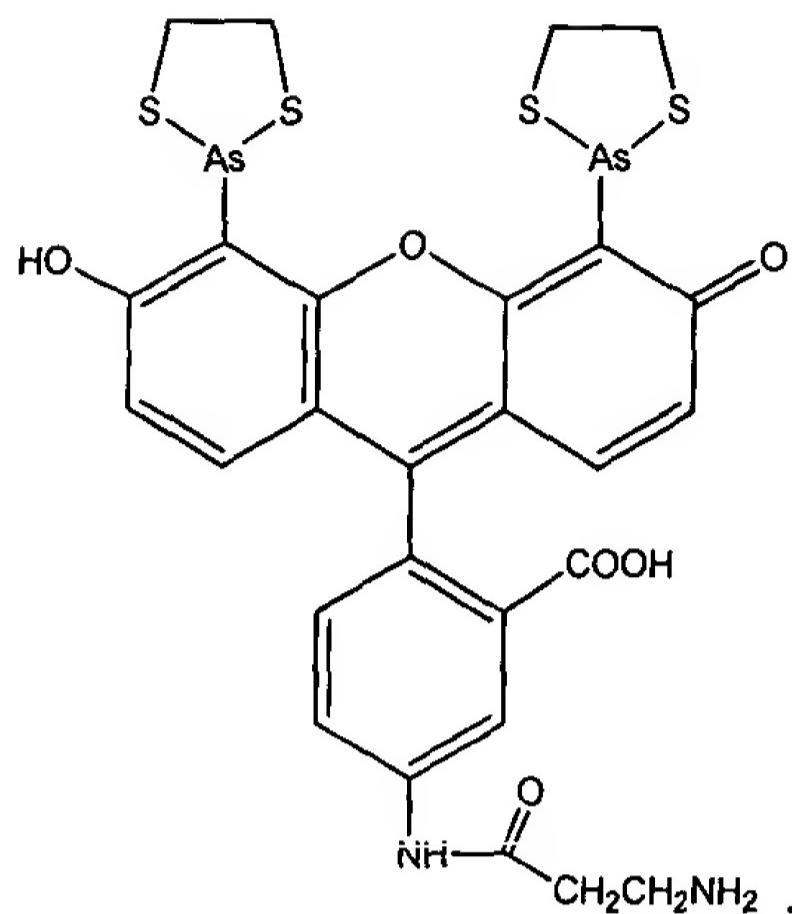
polypeptide of interest, which has been modified to contain a FlAsH target sequence motif, under conditions that allow binding of the polypeptide to the immobilized FlAsH compound; and eluting the polypeptide of interest from the immobilized FlAsH compound.

In applying the cited references as the basis for the anticipation rejections, it is respectfully submitted that the Examiner has misconstrued the invention. For example, the Examiner asserts that both the cited references and the present invention recite "acylation via an anhydride, tautomer or salt" (see Office Action mailed April 22, 2003, page 5, lines 11-16). However, it is respectfully submitted that neither the cited reference nor the present invention, as defined by claim 1, recite a method employing a FlAsH compound which has been modified by acylation with an anhydride, tautomer, or salt. Instead, FlAsH compounds employed in invention methods have been modified by acylation with an amino acid.

Acylation involves the addition of the following moiety:



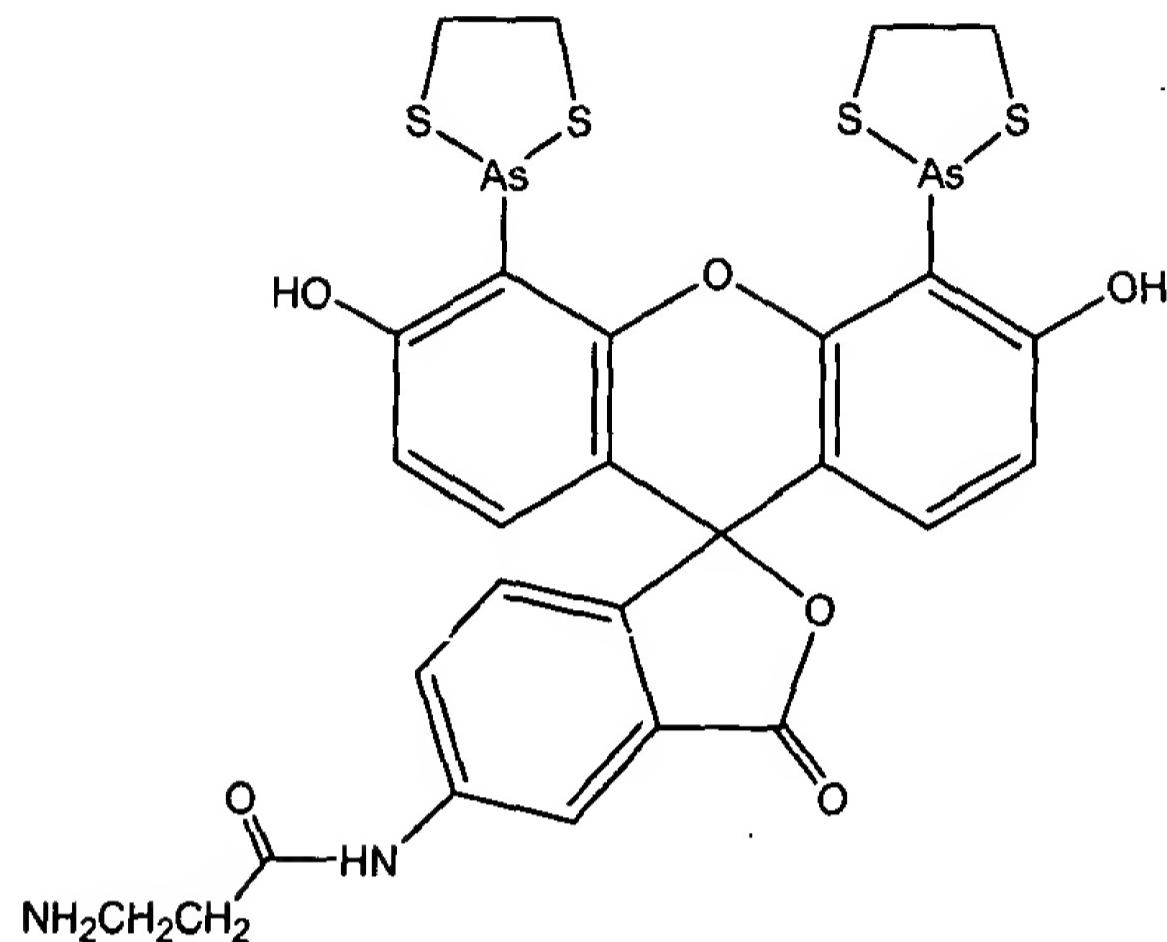
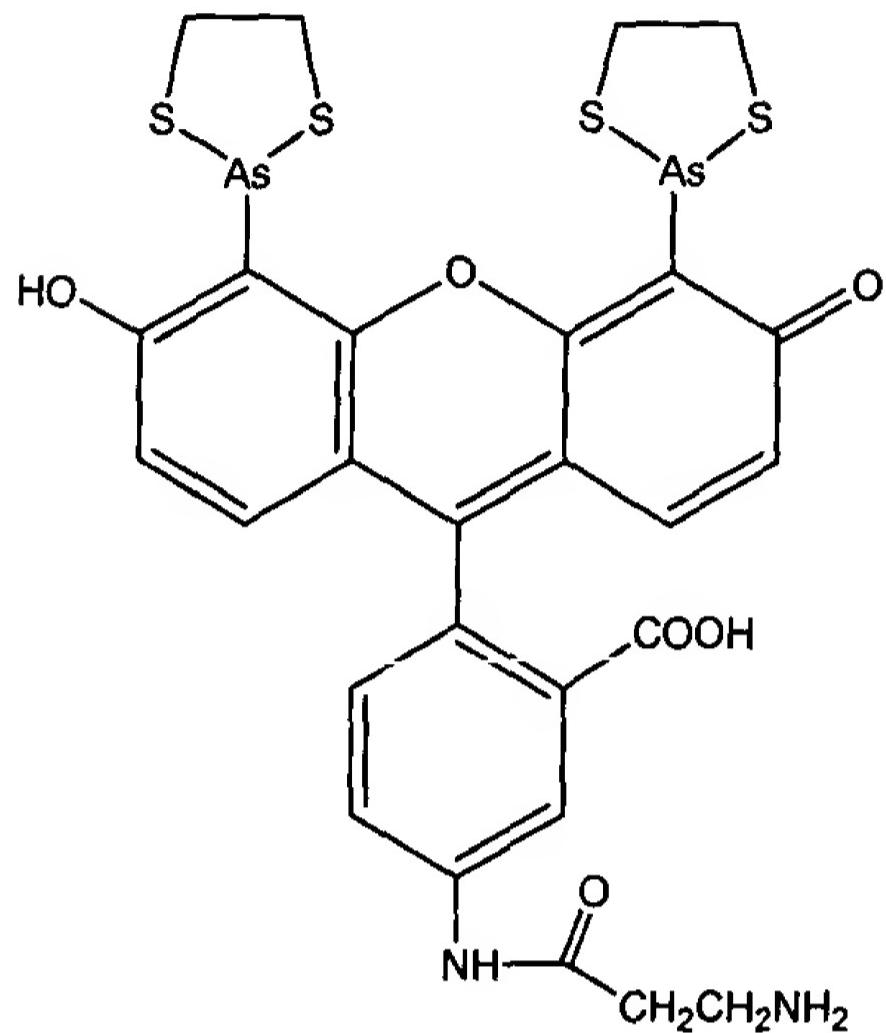
to a suitable functional group. Invention methods employ fluorescein arsenical helix binder (FlAsH) compounds that have been modified by acylation with an amino acid. An example of such a compound is set forth in the specification at the bottom of Figure 1, and is reproduced below explicitly showing the carbonyl moiety of the acyl group:



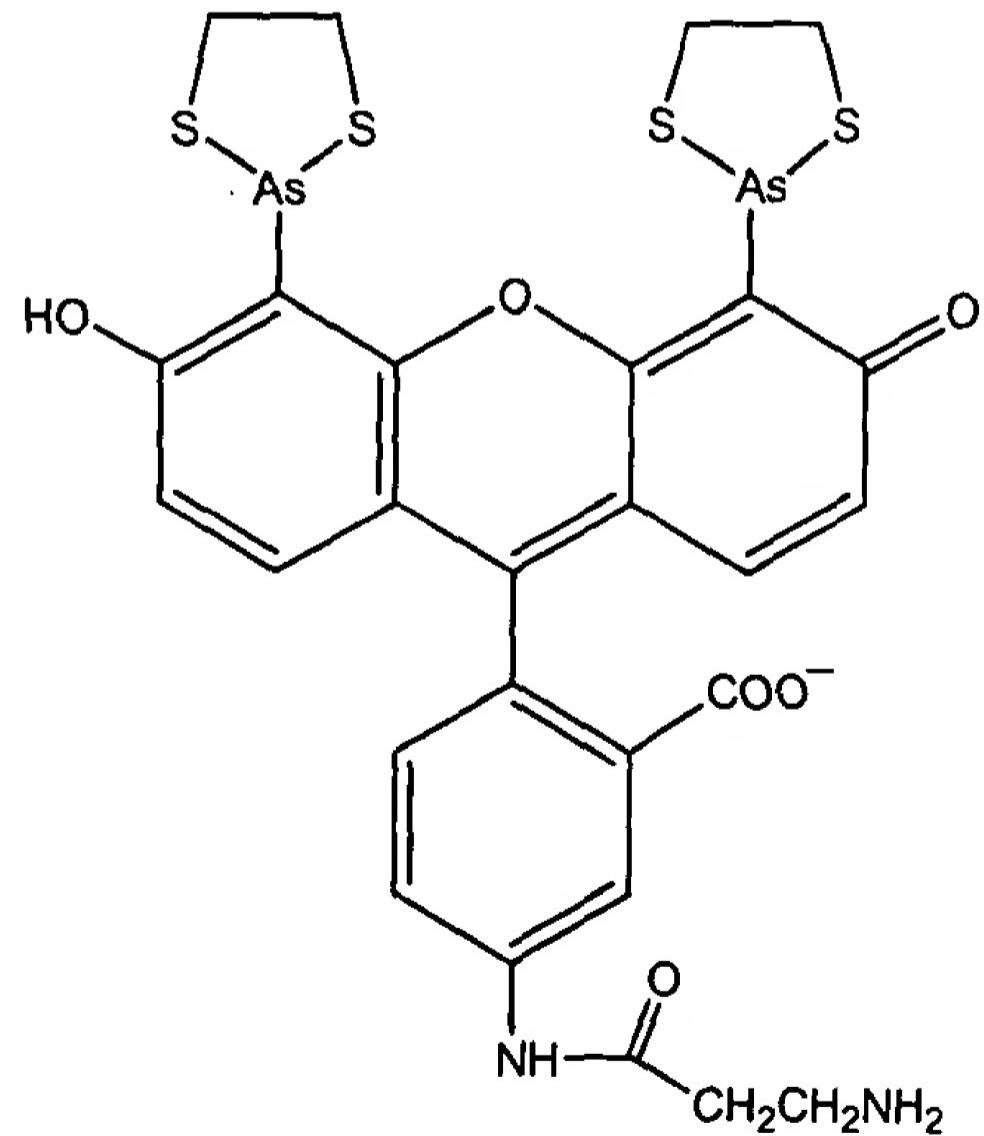
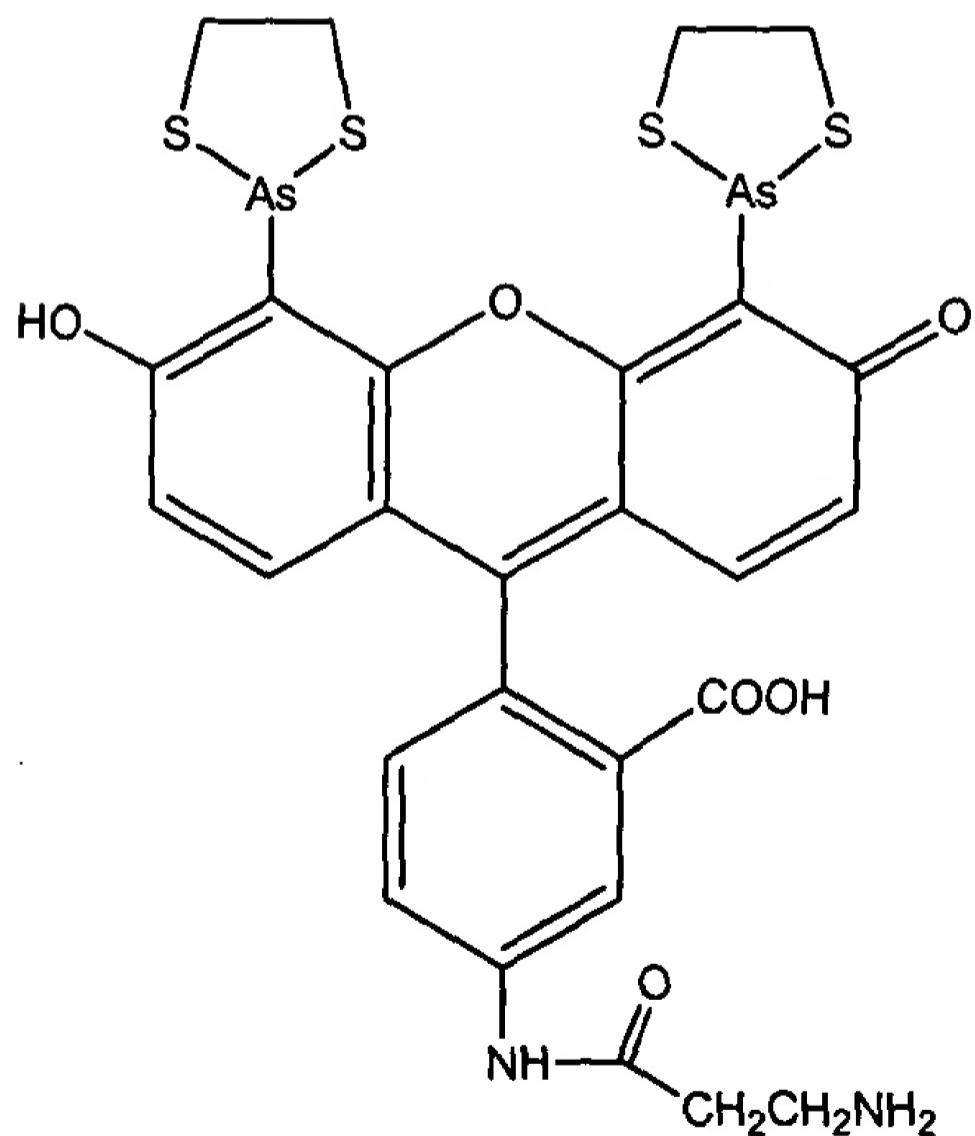
In this structure, it is understood that an amino group at the 5-position of the fluorescein has been modified by acylation with an amino acid, wherein "R" of the acyl moiety is $-\text{CH}_2\text{CH}_2\text{NH}_2$. Those skilled in the art recognize that it is this type of acylation that is set forth in claim 1, and not acylation with an anhydride, tautomer or salt.

Rather than reciting acylation with a tautomer, anhydride or salt (as asserted by the Examiner), claim 1 recites "...a tautomer, anhydride or salt of said modified FlAsH compound...". Thus, those skilled in the art recognize that the tautomer, anhydride or salt set forth in claim 1 are simply alternate forms of the modified FlAsH compounds employed in invention methods (wherein the modification is acylation of the amino group at the 5-position of fluorescein with an amino acid), not alternate acylation methods. For the Examiner's convenience, examples of tautomers, anhydrides, and salts of FlAsH compounds are set forth below:

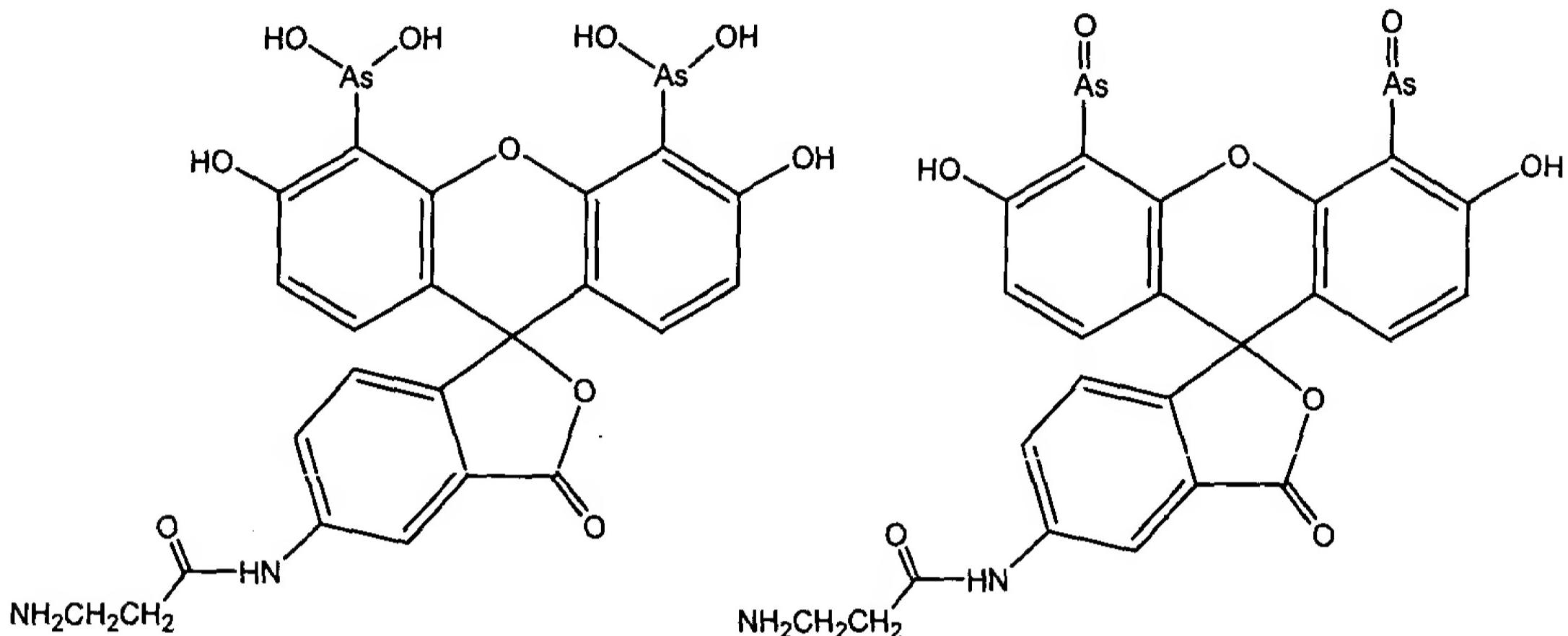
Tautomers



Salts



Anhydrides



In summary, it is submitted that the present invention distinguishes over the cited references by requiring methods employing FlAsH compounds which have been modified by acylation with an amino acid. Accordingly, reconsideration and withdrawal of the rejections of claims 1, 4-7, and 9-12 under 35 U.S.C. § 102(a) and 35 U.S.C. § 102(b) are respectfully requested.

Finally, although the Examiner's suggestion of alternative claim language is acknowledged with appreciation, it is respectfully submitted that this alternative claim language is not required to distinguish the present claims from the cited references.

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Applicant: Vale, et. al.

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Attorney Docket No.: REGEN1500-1

CONCLUSION

In view of the above amendments and remarks, reconsideration and favorable action on all claims are respectfully requested. In the event any matters remain to be resolved, the Examiner is requested to contact the undersigned at the telephone number given below so that a prompt disposition of this application can be achieved.

Respectfully submitted,

Date: 7/22/03



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